

TWO NEW CANADIAN GALL MIDGES.

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Cystiphora canadensis n. sp.,

The interesting midge described below was reared July 10, 1913, by Dr. A. Cosens, Toronto, Canada, from an inconspicuous flat, blister gall on the leaves of white lettuce or rattlesnake root, *Prenanthes altissima* or *P. alba*. This is the second American species of *Cystiphora* to be discovered and is easily distinguished from *C. viburnifolia* Felt by colorational and structural characters.

Gall.—Circular, diameter 5 mm., dark purplish with a paler center. There is no perceptible thickening of the tissues. The galls are placed irregularly between the veins.

Female.—Length 1.25 mm. Antennæ extending to the third abdominal segment, sparsely haired, dark brown; 13 or 14 segments, the fifth cylindrical, with a length twice its diameter; terminal segment either simple or composed of two closely fused segments. Palpi: first segment irregularly capitate, the second subquadrate, the third slender, with a length fully five times its diameter. Mesonotum shining dark brown. Scutellum, postscutellum and abdomen mostly reddish brown, the terminal abdominal segment fuscous, the tip of the ovipositor yellowish. Wings hyaline, the third vein uniting with the anterior margin at the distal ninth. Halteres pale yellowish. Coxæ and femora basally, fuscous yellowish, the distal portion of femora, tibiæ and tarsi mostly fuscous; claws slender, toothed, the pulvilli as long as the claws. Ovipositor with a length nearly half that of the abdomen, the basal half distinctly swollen and rather heavily chitinized, the distal half with a diameter about half that of the basal portion, tapering slightly to a narrowly rounded apex bearing a slender spur. Type Cecid a2441.

Hormomyia helianthi Brodie

1894, Brodie, William—Biol. Rev. of Ont., I, pp. 44-46 (Cecidomyia).

1909, Jarvis, T. D.—Ent. Soc., Ont., 39th Rep't., p. 83 (Cecidomyia).

The axillary galls of this species occur on *Helianthus*. They are more or less cylindrical, occasionally flask-shaped and, according

to the describer, have a length of 10 to 25 mm. and a diameter of from 1.5 to 5 mm. There may be 1 to 10 galls in an axil, firmly attached to the stem by an expanded base and projecting in various directions, usually upwards, often at right angles to the stem and occasionally downward. They occur on the upper third of the stems of *Helianthus decapetalus* and *H. divaricatus*, growing in open woods or in shaded situations. This gall occurs about Toronto, Ont., and has been collected at Evanston, Ill., by Mr. L. H. Weld. A species of *Torymus* has been obtained from this insect. Specimens of this midge were reared June 23, 1907, by Dr. A. Cosens, of the University of Toronto. The following descriptions are drafted from this material.

Male.—Length 2.5 mm. Antennæ probably extending to the fourth abdominal segment, sparsely haired, light yellow; 14 segments, the fifth binodose, the basal stem with a length one-half its diameter, the distal with a length about three-fourths its diameter, the basal enlargement subglobose, the distal subcylindric, slightly expanded apically and with a length nearly twice its diameter; three low, broad circumfili occur on each flagellate segment; terminal segment irregularly binodose, with an indistinct constriction near the basal third, the apex narrowly and irregularly rounded. Mesonotum yellowish brown. Scutellum and postscutellum fuscous yellowish. Abdomen dark yellowish brown, the genitalia fuscous yellowish. Wings hyaline, costa thickly haired, light straw, the third vein uniting therewith well beyond the apex, the fifth at the distal fourth, its branch near the basal half. Halteres, coxæ and femora basally yellowish, the distal portion of femora and tibiæ dark brown, the tarsi a little lighter; claws slender, evenly curved, simple, a little longer than the large pulvilli. Genitalia: basal clasp segment short, broad; terminal clasp segment stout, slightly curved and with a length thrice its diameter; dorsal plate short, very broadly and roundly emarginate, the lobes strongly divergent; ventral plate short, broadly rounded; style short, obtuse.

Female.—Length 3.5 mm. Antennæ nearly as long as the body, sparsely haired, light yellow; 14 segments, the fifth with a stem $\frac{1}{4}$ the length of the cylindric basal enlargement, which latter has a length $2\frac{1}{2}$ times its diameter and three irregular, anastomosing circumfili on the basal portion of the enlargement, with a fourth

